

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
SHELBY COUNTY, ALABAMA)	File No. 0004776280
)	
Request for Waiver of Sections 90.35(a) and)	
90.205(d)(2) of the Commission's Rules)	

ORDER

Adopted: January 23, 2012

Released: January 23, 2012

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. Shelby County, Alabama (Shelby, or the County) filed an application¹ and associated Waiver Requests to use certain Industrial/Business (I/B) Pool frequencies for a trunked public safety radio communications system,² and to operate at greater power than permitted by Part 90 rules.³ Shelby seeks waiver relief pursuant to Section 1.925 of the Commission's rules.⁴ We grant the Waiver Requests in part and as conditioned herein.

II. BACKGROUND

2. Shelby states that it "is in the process of upgrading its radio system to a new five-site system that will provide improved communications capabilities to first responders throughout the county."⁵ Shelby plans to implement "a VHF, P25, digital, trunked radio system which will support all Shelby County, Alabama first responders, public safety agencies and other essential government entity functions."⁶ Although Shelby's application contains frequencies from the Public Safety Pool, it also

¹ See File No. 0004776280 (filed June 22, 2011, amended July 26, 2011, August 12, 2011, October 26, 2011, and November 8, 2011).

² See File No. 0004776280, attached Letter from Alan S. Tilles, Jeffrey W. Rubin, Schulman Rogers Gandal Pordy & Ecker to David Furth, Deputy Chief, Public Safety and Homeland Security Bureau (filed Jan. 13, 2011) (I/B Waiver Request). Shelby seeks authority to operate on 10 frequencies from the I/B Pool: 159.6600, 152.9000, 160.050, 160.1100, 159.8700, 159.9000, 151.5800, 152.9900, 159.9750, and 160.1250 MHz. We note that Shelby replaced frequency 160.0425 MHz with 160.050 MHz (see File No. 0004776280, amended November 8, 2011). Shelby also applied for 14 Public Safety Pool frequencies.

³ See File No. 0004776280, attached "Request for Waiver Section 90.205(d)" (Power Limit Waiver Request). The power limit waiver applies to both the I/B Pool frequencies and the Public Safety Pool frequencies on the application.

⁴ 47 C.F.R. §§ 1.925. See Power Limit Waiver Request at 1; I/B Waiver Request at 1.

⁵ I/B Waiver Request at 1.

⁶ *Id.*

contains frequencies from the I/B Pool because “there [are] not sufficient VHF, public safety pool frequencies available.”⁷

3. In support of its application and Waiver Requests, Shelby submitted a frequency search from the Association of Public-Safety Communications Officials-International, Inc. (APCO) stating that “there are no Public Safety VHF high band (150-170 MHz) frequencies available for assignment, except those [public safety frequencies] currently on the application.”⁸ Shelby “investigated using 700 MHz public safety pool frequencies but determined that a 700 MHz system would require many more tower sites, thereby making a 700 MHz system logistically and financially unfeasible.”⁹ Therefore, the County requests a waiver of Section 90.35(a) of the Commission’s rules “to allow Shelby to become licensed for certain Industrial/Business Pool frequencies.”¹⁰

4. Shelby asserts that “[t]he system has been designed to provide on-street coverage, as well as, in-building coverage” but “[u]nfortunately, due to the height of our Location 2, Pelham, the ‘Safe Harbor Table’ would allow only 1.58 watts ERP [effective radiated power].”¹¹ The County states that it “will be inadequate to accomplish the inbuilding coverage that is needed and desired” since “[c]alculations suggest that a minimum of 60 watts ERP will be required.”¹² Therefore, the County “requests a waiver of Section 90.205(d)(2) to permit 60 watts ERP on all three Part 90, FB8 channels.”¹³ Although Shelby confined its request for waiver of power limits to location 2, we note that Shelby actually requires a waiver for repeaters at fixed locations 1, 2, 4, and 5 as illustrated in the table below. Accordingly, we consider waiver of our rules as indicated below on our own motion with respect to those additional sites.

Location	Proposed ERP (watts)	Maximum allowable ERP (watts) ¹⁴	Section 90.205(d) waiver needed?
1	60	18	Yes
2	60	1.76	Yes
3	60	87	No
4	50	34	Yes
5	40	17	Yes

⁷ *Id.*

⁸ See File No. 0004776280, attached Letter from Carol DiCaro, AFC Processor/Licensing Assistant, APCO International, to Federal Communications Commission (filed June 21, 2011).

⁹ I/B Waiver Request at 1.

¹⁰ *Id.*

¹¹ *Id.* See also 47 C.F.R. § 90.205(d) Table 1. Commission staff calculated a slightly higher allowable ERP of 1.76 watts for Location 2 by using the allowable ERP equation in 47 C.F.R. § 90.205(d), footnote 3, which states that: “[w]hen the actual antenna HAAT is greater than the reference HAAT, the allowable ERP will be reduced in accordance with the following equation: $ERP_{allow} = ERP_{max} * (HAAT_{ref} / HAAT_{actual})^2$.” Shelby’s Location 2 radius is 13 kilometers; ERP_{max} is 178 watts; $HAAT_{ref}$ is 15 meters; and $HAAT_{actual}$ is 151 meters.

¹² Power Limit Waiver Request at 1.

¹³ *Id.* FB8 is a station class code for Centralized Trunked Relay, which is defined as a repeater operating within a centralized trunked radio system which has exclusive use of the designated frequency within a given geographic area.

¹⁴ See *supra* note 11 for the allowable ERP equation.

5. In support of its Waiver Requests, Shelby also submitted letters of concurrence from Shelby County Board of Education, Station WPWW617, co-channel with each of the proposed I/B Pool frequencies; Alabaster Water Board, Station WNCL866, for co-channel I/B Pool frequency 159.870 MHz; and Town of Vincent, Alabama, Station WNUS292, for co-channel Public Safety Pool frequency 155.415 MHz.¹⁵

6. On September 8, 2011, the Public Safety and Homeland Security Bureau (Bureau) placed Shelby's Waiver Requests and associated application on public notice.¹⁶ The Bureau sought comment generally on the request, and also sought "comment on whether the 700 MHz public safety band would provide a viable alternative, particularly since the digital transition date has passed and in the light of the Commission's actions to facilitate a 700 MHz nationwide, interoperable broadband public safety network."¹⁷ In addition, the Bureau sought comment on whether "Shelby could upgrade its radio trunked system and improve interoperability by using frequencies in the 700 MHz public safety band, rather than upgrade using I/B frequencies."¹⁸

7. The Bureau received one comment from the Enterprise Wireless Alliance (EWA) in opposition.¹⁹ EWA states that "[a] public safety application that seeks channels from the Industrial/Business Pool must be examined carefully to ensure that (i) there are no public safety frequencies that are better suited for the proposed use; (ii) the application has been properly coordinated for the system parameters proposed; and (iii) the applicant has a clear understanding of the VHF Industrial/Business Pool spectrum environment and is prepared to cooperate and coordinate in its use of the spectrum as required by the FCC rules."²⁰ EWA argues that "the application submitted by APCO states only that there are no public safety pool frequencies available for Columbiana, Alabama (Location 1)."²¹ EWA also states that "[t]here is no frequency availability analysis provided for the County's four other primary, fixed locations, [e]ven as to Location 1, the APCO report does not include contour

¹⁵ See File No. 0004776280, attached Letter from RS/AAA to Federal Communications Commission (filed June 22, 2011); two Letters from Randy Fuller, Superintendent, Shelby County Schools to Shelby County Alabama, Attn: Phil Burns (dated June 20, 2011, October 24, 2011); Letter from Pete Lucas, Manager, Alabaster Water Board to Sheriff Chris Curry, Shelby County Sheriff's Office (dated June 14, 2011); and Letter from Max A. Roper, Communications Liaison, Town Of Vincent Police Department to Shelby County AL, Attn: Phil Burns (filed August 12, 2011).

¹⁶ See Public Safety and Homeland Security Bureau Seeks Comment on Request for Waiver Filed by Shelby County, Alabama to Operate a Trunked Public Safety Communications System Using Certain Industrial/Business Pool Frequencies in the 150-170 MHz Band, *Public Notice*, 26 FCC Rcd 12756 (PSHSB 2011) (*Public Notice*).

¹⁷ *Id.* at 12758 *citing* Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229; Development of Operational, Technical and Spectrum Requirements for Meeting Federal State and Local Public Safety Communications Requirements through the Year 2010, WT Docket No. 96-86, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*700 MHz Second Report and Order*).

¹⁸ *Public Notice* at 3.

¹⁹ See Letter from Mark E. Crosby, President/CEO, Enterprise Wireless Alliance to Marlene H. Dortch, Secretary, Federal Communications Commission (filed September 28, 2011) (EWA Comments).

²⁰ *Id.* at 1-2.

²¹ *Id.* at 2.

evaluations, only distance calculations.”²² EWA asserts that the APCO “report shows that frequencies 151.1825, 151.2425, 151.4525, 159.2925 and 159.4275 MHz have licensees, such as the State of Mississippi, within a specified search radius, but does not explain why those frequencies are not available for use by the County even though, according to EWA’s calculation, the State of Mississippi’s border is 137 km from the County’s proposed system.”²³ Furthermore, EWA “conducted a review of the public safety spectrum at the County’s proposed locations and identified frequencies 170.575, 171.425, 171.475, 171.575 and 172.375 MHz as available for exclusive use (FB8/MO8) operations at all of the County’s fixed and mobile sites with no co-channel or adjacent channel licensees located within 100 miles.”²⁴

8. In addition, EWA states its “review of the Industrial/Business certified frequencies indicates that not all appear to comply with the frequency coordination requirements of FCC Rule Section 90.187, and, more specifically, with the FCC’s mandated coordination policy for mobiles in centralized trunked system operations.”²⁵ Specifically, EWA cites four issues:

- (a) “the proposed interfering contour of 160.0425 MHz at location 2 overlaps the service contour of WNXR937 on 160.035 MHz;
- (b) the proposed interfering contour of 160.110 MHz at location 4 overlaps the service contour of WQBF548 on 160.110 MHz;
- (c) the interfering contour of 159.975 MHz at location 10 overlaps the service contour of WQNK824 on 159.975 MHz; and
- (d) the interfering contour of 160.125 MHz at location 10 overlaps the service contour of WPWG735 on 160.125 MHz.”²⁶

9. Shelby filed reply comments stating that the 150-159 MHz frequencies that EWA suggested are “not available for Shelby’s use, as there is a 7.5 kHz adjacent channel licensee” to each frequency.²⁷ Besides the geographic proximity of these adjacent channel licensees, we infer that Shelby’s operation on the EWA-suggested frequencies would cause interference to the adjacent channel incumbent licensees only 7.5 kHz away due to mutual bandwidth overlap, which would not be resolved by the narrowbanding of all VHF licenses by January 1, 2013.²⁸ Regarding the 170-172 MHz frequencies that EWA suggested, Shelby states that “the Commission is without authority to waive Limitation 49, as these

²² *Id.*

²³ *Id.*

²⁴ *Id.* These frequencies are allocated for Federal use and are assigned on a secondary basis to licensees engaged in forest firefighting and conservation activities. See 47 C.F.R. §§ 90.20(d)(49), 90.2659(c). MO8 is a station class code for Centralized Trunked Mobile, which is a mobile or hand-held transceiver operating in a centralized trunked radio system within an exclusive geographic area.

²⁵ EWA Comments at 2.

²⁶ *Id.* Shelby’s locations 2 and 4 are fixed sites for repeater stations. Location 10 is a mobile service area centered at fixed site location 5 with a radius of 28 kilometers. See File No. 0004776280. All the incumbent stations have mobile units on the given frequencies.

²⁷ See Letter from Alan S. Tilles, Esquire, Counsel to Shelby County, Alabama, Schulman Rogers Gandal Pordy & Ecker to Marlene H. Dortch, Secretary, Federal Communications Commission (filed November 7, 2011) (Shelby Reply Comments) at 3.

²⁸ See 47 C.F.R. § 90.209(b). See *infra* para. 12 for further discussion on the EWA-suggested frequencies.

particular frequencies are controlled by NTIA [the National Telecommunications and Information Administration].”²⁹ As we discuss in more detail below, Shelby also made several amendments in response to EWA’s finding of four potential interference issues.³⁰ In addition, Shelby provided APCO’s frequency availability analyses for the four other primary, fixed locations.³¹

III. DISCUSSION

10. Section 1.925 of the Commission’s rules provides that to obtain a waiver of the Commission’s rules, a petitioner must demonstrate either that: “(i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the waiver would be in the public interest;³² or (ii) [i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”³³ Applicants seeking a waiver face a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.³⁴ We evaluate the Waiver Requests using the first prong of Section 1.925 below. We proceed with analyses of each rule for which Shelby requests waiver.

11. *Section 90.35(a)*. The Commission consolidated the private land mobile radio services below 800 MHz into the I/B and Public Safety Pools in 1997 to increase spectrum efficiency, increase licensee flexibility to manage the spectrum more efficiently, and reduce administrative burdens on users as well as the Commission.³⁵ The Commission maintained a separate Public Safety Pool (as opposed to a single pool covering all users) to maintain the integrity of the critical functions of the users included within this pool.³⁶ According to Shelby, “there is not sufficient VHF, public safety pool frequencies available.”³⁷ We examine whether Shelby has sufficiently exhausted VHF public safety frequency options to determine whether the underlying purpose of rule 90.35(a), which codifies eligibility for the I/B pool, would not be served or would be frustrated by application to the instant case.

12. Regarding EWA’s suggestion that frequencies 151.1825, 151.2425, 151.4525, 159.2925 and 159.4275 MHz are preferable, Shelby states that these are “not available for Shelby’s use, as there is

²⁹ *Id.* at 4.

³⁰ See Shelby Reply Comments at 4, attached Contour Studies.

³¹ See File No. 0004776280, attached Letter from Carol DiCaro, APCO International, to Alan Tilles, Shulman Rogers Gandal Pordy & Ecker, P.A. (dated October 3, 2011).

³² 47 C.F.R. § 1.925(b)(3)(i).

³³ 47 C.F.R. § 1.925(b)(3)(ii).

³⁴ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969), *aff’d*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) (*citing Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); *Birach Broad. Corp., Memorandum Opinion and Order*, 18 FCC Rcd 1414, 1415 (2003).

³⁵ See Replacement of Part 90 By Part 88 To Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services, *Second Report and Order*, 12 FCC Rcd 14307, 14315 ¶ 15 (1997).

³⁶ *Id.* at 14316 ¶ 16. See also West Virginia Department of Health and Human Resources/State Trauma Emergency Care System, *Order*, 25 FCC Rcd 12566, 12568 at ¶ 9 (PSHSB PD 2010) (*West Virginia Order*).

³⁷ I/B Waiver Request at 1.

a 7.5 kHz adjacent channel licensee” to each frequency.³⁸ Section 90.187(b)(2)(i) considers stations that have assigned frequencies up to 7.5 kHz removed from proposed frequencies as “affected licensees” for trunking applicants proposing 12.5 kHz bandwidth, which is the applicable bandwidth classification for the County.³⁹ Our analysis indicates that Shelby’s interfering contours would overlap the service contours of all of the 7.5 kHz adjacent channel incumbent licensees that APCO identified, even if Shelby were to reduce power to conform to Section 90.205. Thus, these affected licensees would be subject to objectionable interference if Shelby were to operate on the frequencies suggested by EWA.⁴⁰ Accordingly, we believe that the County has exhausted the public safety pool frequencies.

13. Next, regarding EWA’s suggestion of frequencies 170.575, 171.425, 171.475, 171.575 and 172.375 MHz, Shelby states that “the Commission is without authority to waive Limitation 49, as these particular frequencies are controlled by NTIA.”⁴¹ As we noted above, these frequencies are allocated for Federal use and are assigned on a secondary basis only to licensees engaged in forest firefighting and conservation activities.⁴² Because operations on these frequencies are secondary to Federal users, we find that these frequencies are technically unsuitable for an exclusive use, trunked system as proposed by the County. We conclude that Shelby has exhausted the VHF public safety frequencies raised by EWA.

14. As part of our analysis, we note that in 2010, the Bureau’s former Policy Division (now the Policy and Licensing Division) stated that “future non-I/B Pool eligible applicants seeking waivers to deploy multiple I/B Pool channels on a wide-area basis will be expected to demonstrate that a grant of their application(s) would not result in an inadequate supply of I/B channels in the relevant geographic areas for future I/B Pool eligible applicants.”⁴³ We find that Shelby has made this demonstration. Given the Shelby County Board of Education’s concurrences and its long-standing authorization for the I/B frequencies at issue,⁴⁴ a grant of Shelby’s application would not deplete any I/B frequencies from the available I/B Pool in the geographic area. For this reason, Shelby states that its application “does not make such spectrum more encumbered.”⁴⁵ Therefore, we conclude, subject to our review of the four potential interference issues below, that the underlying purpose of Section 90.35(a) would not be served or would be frustrated by application to the present case.

³⁸ Shelby Reply Comments at 3.

³⁹ The County proposes 8 kHz bandwidth. *See* File No. 0004776280. 47 C.F.R. § 90.187(b)(2)(i) determines the frequency separation of affected stations based on the proposed bandwidth of trunked stations in three categories: 25 kHz, 12.5 kHz, and 6.25 kHz. We round the County’s bandwidth up and find that 12.5 kHz is the applicable proposed bandwidth for determining the frequency separation of affected stations. *See* 47 C.F.R. § 90.187(b)(2)(i).

⁴⁰ 47 C.F.R. § 90.187(b)(2)(iii) states, “[o]bjectionable interference is considered to exist when the interference contour ... of the proposed station intersects the service contour ... of an existing station.”⁴⁰

⁴¹ Shelby Reply Comments at 4.

⁴² *See supra* note 24. Moreover, 47 C.F.R. § 90.265(c)(5) would require the applicant to obtain a letter of concurrence from the United States Department of Agriculture.

⁴³ *See West Virginia Order*, 25 FCC Rcd 12566, 12568 at n. 23.

⁴⁴ *See* license for Station WPWW617.

⁴⁵ Shelby Reply Comments at 4.

15. *Section 90.205(d)(2)*. The underlying purpose of this rule is to ensure that applicants “request and use no more than the actual power necessary for satisfactory operation.”⁴⁶ Shelby states that “Section 90.205(d)(2) provides that deviations from the table can be permitted where it is shown that the 37 dBuV/m service contour will not extend beyond the requested service area.”⁴⁷ Shelby’s proposed system was “designed to provide on-street coverage, as well as, in-building coverage.”⁴⁸ Given that Shelby specifies that it must have the requested power to provide in-building coverage, we are persuaded that in-building coverage is a prerequisite for satisfactory operation of Shelby’s system. We note that the Shelby County Board of Education, Alabaster Water Board and Town of Vincent agree “to accept and/or mutually work [with Shelby County] to cure any interference resulting from reduced separation between the systems.”⁴⁹ Thus, as a general matter, and subject to our review of the four potential interference issues below, we find that the underlying purpose of the rule would not be served by application to the instant case.

16. Next, we address power limitations associated with the four specific issues raised by EWA. Because Shelby proposes a trunked system, we apply the criteria of Section 90.187(b)(2) of the Commission’s rules⁵⁰ to determine whether the incumbent stations identified by EWA would be subject to objectionable interference if Shelby were to operate at the proposed power levels. Section 90.187(b)(2)(iii) states, “[o]bjectionable interference is considered to exist when the interference contour ... of the proposed station intersects the service contour ... of an existing station.”⁵¹

17. For EWA’s issue (a), which states that “the proposed interfering contour of 160.0425 MHz at location 2 overlaps the service contour of WNXR937 on 160.035 MHz,” Shelby proposes to use 60 watts ERP at location 2 even though the Safe Harbor Table would only permit 1.76 watts ERP.⁵² After EWA noted this objection, Shelby swapped frequency 160.0425 MHz with a new frequency, 160.050 MHz, due to “initial error in selection.”⁵³ Accordingly, Shelby submitted a second letter of concurrence from incumbent licensee Shelby County Board of Education.⁵⁴ Given this swap, Station WNXR937, licensed to Fabarc Steel, is no longer an affected station in accordance with Section 90.187(b)(2)(iii)(B).⁵⁵ Since Shelby’s operation at location 2 on frequency 160.050 MHz has concurrence from the Shelby County Board of Education and would not interfere with any other incumbent licensees, we find that the underlying purpose of the rule limiting ERP would not be served and permit 60 watts at location 2 as requested.

⁴⁶ 47 C.F.R. § 90.205.

⁴⁷ Power Limit Waiver Request at 1.

⁴⁸ *Id.*

⁴⁹ *See supra* note 15.

⁵⁰ 47 C.F.R. § 90.187(b)(2).

⁵¹ 47 C.F.R. § 90.187(b)(2)(iii).

⁵² *See table supra.*

⁵³ Shelby Reply Comments at 4.

⁵⁴ *See* File No. 0004776280, attached Letter from Randy Fuller, Superintendent, Shelby County Schools to Shelby County Alabama, Attn: Phil Burns (dated October 24, 2011).

⁵⁵ *See* 47 C.F.R. § 90.187(b)(2)(iii)(B).

18. For EWA's issue (b), which indicates that "the proposed interfering contour of 160.110 MHz at location 4 overlaps the service contour of WQBF548 on 160.110 MHz," Shelby proposes to operate on frequency 160.110 MHz at location 4 using 50 watts ERP even though Section 90.205(d) would permit only 34 watts ERP.⁵⁶ Shelby submitted a contour plot for frequency 160.110 MHz purporting to demonstrate that there would be no contour overlaps with incumbent Station WQBF548, licensed to EAI Corp.⁵⁷ However, the Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau's (Bureaus) previously advised the Land Mobile Communications Council (LMCC) that "[i]f the existing station is a mobile-only operation, then the mobile should be studied at the edge of the mobile area of operation specified on the license."⁵⁸ Shelby did not plot a service contour for a mobile unit for Station WQBF548 at the edge of its service area. We performed our own contour analysis of Shelby's operation on location 4 on frequency 160.110 MHz at 50 watts ERP, and Shelby's interference contour overlaps the service contour of a Station WQBF548 mobile unit placed at the edge of the service area closest to Shelby County. On the other hand, we found that location 4 limited to 34 watts ERP eliminates overlap with the Station WQBF548 mobile unit. Based on our results, we find that application of the rule limiting ERP to 34 watts would protect the incumbent license, Station WQBF548. Accordingly, we find that Shelby has not met its burden under the first prong of Section 1.925. Moreover, under the second prong of Section 1.925, the protection of the incumbent license by application of the rule is an equitable outcome that serves the public interest. We also find 34 watts ERP to be a reasonable alternative because it represents less than a 3 dB reduction in power relative to the requested 50 watts ERP. Accordingly, we find that Shelby has not met its burden under the second prong of Section 1.925 either. Thus, we decline to waive Section 90.205(d) in this case, and we condition operation on frequency 160.110 MHz at location 4 limited to 34 watts ERP consistent with Section 90.205(d).⁵⁹

19. EWA's issues (c) and (d) involve Shelby's location 10, which is a mobile area centered at the location 5 repeater site.⁶⁰ For issue (c), in which EWA suggests "the interfering contour of 159.975 MHz at location 10 overlaps the service contour of WQNK824 on 159.975 MHz," Shelby states that it has "removed this frequency from its application"⁶¹ to eliminate any interference with incumbent Station WQNK824, licensed to Level 5 Motorsports. We conclude that issue (c) is now moot. For issue (d), in which EWA argues that "the interfering contour of 160.125 MHz at location 10 overlaps the service contour of WPWG735 on 160.125 MHz," Shelby states that "there is no greater chance of interference from the County's operation" on location 10 with 160.125 MHz frequency because "the County's proposed operation on this frequency is wholly encompassed within the original contour of the Board of

⁵⁶ See table *supra*.

⁵⁷ See Shelby Reply Comments at 3, attached Contour Study.

⁵⁸ See Letter from Fred Campbell, Chief, Wireless Telecommunications Bureau, and Derek Poarch, Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission to Ralph A. Haller, President, Land Mobile Communications Council, 23 FCC Rcd 4714 (WTB PSHSB 2008) at 3 note 22 (WTB-PSHSB Letter to LMCC).

⁵⁹ Although we intend for this restriction to reduce the interfering contour on frequency 160.110 MHz, we understand that Shelby would have to reduce the actual power for frequency 155.415 MHz as well at location 4 since the two frequencies share the same antenna. However, we waive Section 90.205(d) to permit 50 watts ERP for frequency 155.415 MHz at location 4.

⁶⁰ See File No. 0004776280.

⁶¹ Shelby Reply Comments at 4.

Education license,” Station WPWW617.⁶² However, in the WTB-PSHSB Letter to LMCC, the Bureau stated, “to avoid trunked systems from causing interference to existing stations operating in a shared environment, affected station calculations must be determined with mobile units located at the edge of their associated base station’s service contour.”⁶³ Shelby’s analysis failed to plot a location 10 mobile unit at the edge of the location 5 service area as well as any contours for Station WPWG735, licensed to Arab City Schools. We performed our own contour analysis conforming to the Bureau’s guidance. With location 5 operating at the requested 40 watts ERP, we placed a hypothetical Shelby mobile unit along the location 5 service contour closest to Station WPWG735. The resulting mobile interfering contour overlaps Station WPWG735’s mobile service contour located at the edge of the associated base station service contour closest to Shelby. Thus, we agree with EWA’s findings on this issue, and find that Shelby’s proposed operation may cause objectionable interference to Station WPWG735. However, we may mitigate potential interference by restricting mobile units from operating in areas closest to Station WPWG735. The requested operating area of Shelby mobile units at location 10 extends 28 kilometers from the location 5 site⁶⁴ and extends into Jefferson and St. Clair Counties to the north. Because these counties are closer to Station WPWG735 and are not part of Shelby County, we impose a condition that location 10 mobile units on frequency 160.125 MHz may operate only within Shelby County.

20. *Public Interest.* Based upon the record, we find that Shelby has demonstrated that partial grant of the waiver, as indicated above, would be in the public interest. Granting the instant application and request as conditioned herein will allow Shelby to upgrade “its radio system to a new five-site system that will provide improved communications capabilities to first responders throughout the county.”⁶⁵ We find it significant that “[t]he new, VHF, P25 system will be available for use by all Shelby County, Alabama public safety agencies and the following agencies have already committed to utilizing the system, the City of Alabaster Fire and Rescue, the City of Calera Police Department, the City of Chelsea Fire and Rescue, the City of Harpersville Police Department, the City of Vincent Police Department, the Shelby County 911 Center, the Shelby County Administration Office, the Shelby County Board of Education, the Shelby County EMA and the Shelby County Sheriff’s Department.”⁶⁶ Moreover, several other agencies “have agreed to utilize the new system as funding becomes available.”⁶⁷ We therefore find that partial grant of Shelby’s Waiver Requests as conditioned herein is in the public interest.

IV. CONCLUSION

21. Based on the foregoing, we conclude that Shelby has made a sufficient showing for a partial grant of its requested waivers under Section 1.925 of the Commission’s rules. Moreover, we find that Shelby’s amendments and the special conditions we apply herein resolve the four potential interference issues raised by EWA. We therefore grant a waiver of Section 90.35(a) to permit Shelby to use the proposed I/B Pool frequencies and grant in part, to the extent indicated herein, a waiver of Section 90.205(d) to use the proposed power levels at locations 1, 2, 4 (for frequency 155.415 MHz only), and 5

⁶² *Id.*

⁶³ WTB-PSHSB Letter to LMCC, 23 FCC Rcd at 4716.

⁶⁴ *See* File No. 000477280.

⁶⁵ Power Limit Waiver Request at 1.

⁶⁶ I/B Waiver Request at 2.

⁶⁷ *Id.*

to provide in-building coverage.⁶⁸ However, we limit the power on frequency 160.110 MHz at location 4 to 34 watts ERP. Furthermore, we condition the license grant that mobile units at location 10 on frequency 160.125 MHz may operate only within Shelby County.

V. ORDERING CLAUSES

22. Accordingly, WE ORDER pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925(b)(3) of the Commission's rules, 47 C.F.R. § 1.925(b)(3), that the Waiver Requests, as amended, associated with File No. 0004776280 filed by Shelby County, Alabama ARE GRANTED IN PART, to the extent indicated herein.

23. WE FURTHER ORDER that File No. 0004776280 SHALL BE PROCESSED consistent with this *Order* and the Commission's rules.

24. We take this action under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

Thomas J. Beers
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau

⁶⁸ Shelby does not require a power level waiver for location 3. *See supra* note 59; we waive Section 90.205(d) to permit 50 watts ERP for frequency 155.415 MHz at location 4.